

Notice of Allowability

Application No.

09/716,253

Examiner

DANIEL G MARIAM

Applicant(s)

SOKOLOV, SKIFF

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an amendment filed on November 19, 2004, and a telephone interview dated 11/12 & 12/02/04
2. ☒ The allowed claim(s) is/are 1-7 and 9-20.
3. ☒ The drawings filed on 12 August 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), (and 11/12/04) Paper No./Mail Date 12/03/2004.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


DANIEL MIRIAM
PRIMARY EXAMINER

EXAMINER'S AMENDMENT AND ALLOWANCE

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Chad Billings (Reg. No. 48917) on November 12, 2004 (and December 2, 2004).

The application has been amended as follows:

Amend claim 6 as follows:

At line 6, after the limitation "pixel" insert "value" - -

At line 7, after the limitation "pixel" insert "value" - -

At line 7, delete "said" and replace it with "a" - -

At line 8, after the limitation "pixel" insert "value" - -

At line 9, after the limitation "pixel" insert "value" - -

At line 11, after the first occurrence of the limitation "pixel" insert "value" - -

At line 11, after the second occurrence of the limitation "pixel" insert "value" - -

Amend claim 9 as follows:

At line 13, delete "are" and replace it with "is" - -

Allowance

2. Claims 1-7 and 9-20 are allowed.

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3. The following is an examiner's statement of reasons for allowance: with respect to independent claims 1 and 9, the instant invention discloses a method for reduction of noise in an image. None of the references disclose or fairly suggest the reduction of noise in an image by, among other things, grouping pixels adjacent the region in pairs, wherein the pixels of each pair being oppositely located with respect to a selected pixel; adding said pairs, pair by pair, to the region in dependence on that the squared difference of the selected pixel value from the pairs half sums of the average value of the pixels in the region, does not exceed the dispersion of the noise of said difference multiplied by a tolerance level as defined in independent claims 1 and 9. It is for this reason and in combination with all of the other elements of the claims that claims 1-5, 9-16, and 18 are allowable over the prior art of record.

With respect to independent claim 6, as applicants properly point out, starting on page 16 of the remarks, that the prior art of ITO, et al. fails to teach obtaining a noise reduced value of a second pixel located in a second image, calculating an estimate of the fluctuation of the second pixel, calculating an estimate of the fluctuation of a first pixel located in the first image, wherein the fluctuation of the first pixel is correlated to the fluctuation of the second pixel, and obtaining a noise reduced value of the first pixel by subtracting the estimate of the fluctuation of the first pixel from the first image. Hence, and in view of applicant's argument, the 35 U.S.C 102 rejection thereof is withdrawn making independent claim 6 allowable. Since claims 7, 17, and 19-20 further restrict this claim, they are allowable also.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G MARIAM whose telephone number is 703-305-4010. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LEO BOUDREAU can be reached on 703-305-4607. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DANIEL MIRIAM
PRIMARY EXAMINER

December 3, 2004